REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-14 are presently pending in this application, Claims 1-4 having been amended and Claims 5-14 having been newly added by the present amendment.

In the outstanding Office Action, Claims 1-4 were rejected under 35 U.S.C. §102(a) as being anticipated by JP 2001-190916 (hereinafter "JP '916"); Claims 1-4 were rejected under 35 U.S.C. §102(a) as being anticipated by JP 2001-98936 (hereinafter "JP '936"); and Claims 1-4 were rejected under 35 U.S.C. §102(b) as being anticipated by EP 0 816 065 (hereinafter "EP '065").

The specification has been amended for a typographical error.

Claims 1-4 have been amended and Claims 5-14 have been newly added herein. These amendments and additions in the claims are believed to find support in the specification, claims and drawings as originally filed, and no new matter is believed to be added thereby. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim language.

Before addressing the outstanding rejections based on the cited references, a brief summary of Claim 1 as currently amended is believed to be in order. Claim 1 according to the present invention is directed to a honeycomb filter for purifying exhaust gases and recites: a ceramic block comprising columnar porous ceramic members each having partition walls and through holes separated by the partition walls and extending in parallel with one another in a longitudinal direction of the columnar porous ceramic members, the through holes including ones plugged on an inlet side of the ceramic block and ones plugged on an outlet side of the ceramic block, the ceramic block having a circumferential surface extending in the

longitudinal direction between the inlet side and the outlet side; an adhesive layer adhering and interposed between the columnar porous ceramic members; and a sealing layer sealing the circumferential surface of the ceramic block. The adhesive layer and the columnar porous ceramic members satisfy a relationship, $0.01 < |\alpha_L - \alpha_F|/\alpha_F < 1.0$, where α_L is a thermal expansion coefficient of the adhesive layer and α_F is a thermal expansion coefficient of the columnar porous ceramic members.

By providing such an adhesive layer and porous ceramic members, the honeycomb filter achieves a better durability against a thermal stress and an internal stress caused by thermal expansion. That is, the sealing layer surrounding the circumference of the ceramic block can cause a larger internal stress on the porous ceramic members, and as seen from Figure 4, the adhesive layer and the porous ceramic members satisfying the relationship as set forth above alleviates thermal stress while achieving superior mechanical strength against internal stress.[1]

JP '916 and JP '936 are directed to a honeycomb structure and an exhaust emission control device. However, neither JP '916 nor JP '936 teaches or suggests "a ceramic block comprising a plurality of columnar porous ceramic members ...; an adhesive layer adhering and interposed between the columnar porous ceramic members ..., wherein the adhesive layer and the columnar porous ceramic members satisfy a relationship, $0.01 < |\alpha_L - \alpha_F|/\alpha_F < 1.0$, where α_L is a thermal expansion coefficient of the adhesive layer and α_F is a thermal expansion coefficient of the columnar porous ceramic members" as recited in amended Claim 1. On the other hand, JP '916 merely states that a honeycomb structure 10 has a multiple honeycomb segments 11 bonded by a bonding layer 12, where at least either one of the Young's modulus of the bonding layer 12 being 20 % or less of that of the honeycomb

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[1] See Specification, page 6, line 13, to page 10, line 18, as well as Figure 4.

segments 11 and the strength of the bonding layer 12 being lower than that of the material of the honeycomb segments 11, and nowhere does JP '916 discuss a sealing layer surrounding the honeycomb structure or the thermal expansion coefficients of the bonding layer 12 and honeycomb segments 11. JP '936 only shows a filter 22 made up of multiple filter segments bonded by adhesive, and according to JP '936, the circumference of the filter 22 is simply surrounded by the heat insulating layer 23, a "mat-like object formed including ceramic fiber[s]" and not a sealing layer. Moreover, JP '936 does not appear to mention either the thermal expansion coefficients of the filter segments and adhesive or any sealing layers around the circumference of the filter 22. Therefore, the subject matter recited in Claim 1 is believed to be distinguishable from both JP '916 and JP '936, and is not anticipated thereby.

EP '065 is also directed to a ceramic structure. Nevertheless, EP '065 does not teach or suggest "a ceramic block comprising a plurality of columnar porous ceramic members ...; an adhesive layer adhering and interposed between the columnar porous ceramic members ..., wherein the adhesive layer and the columnar porous ceramic members satisfy a relationship, $0.01 < |\alpha_L - \alpha_F|/\alpha_F < 1.0$, where α_L is a thermal expansion coefficient of the adhesive layer and α_F is a thermal expansion coefficient of the columnar porous ceramic members" as recited in amended Claim 1. Instead, EP '065 simply shows a filter 1 which is constructed of ceramic members 2, 3 adhered by a sealing layer 4 interposed between the ceramic members 2, 3, and EP '065 does not discuss the thermal expansion coefficients of the filter segments and the sealing layer 4 either. As such, the subject matter recited in Claim 1 is also believed to be distinguishable from EP '065, and is not anticipated thereby.

Furthermore, because none of JP '916, JP '936 and EP '065 discloses the thermal expansion coefficients as recited in Claim 1, even the combined teachings of these cited references are not believed to render the subject matter recited in Claim 1 obvious.
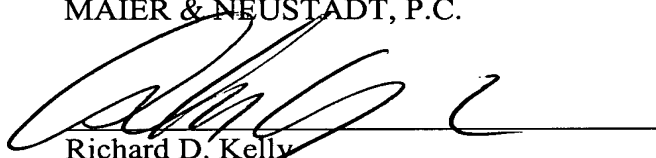
Likewise, Claim 2 includes subject matter substantially similar to what is recited in Claim 1 to the extent discussed above. Thus, Claim 2 is also distinguishable from JP '916, JP '936 and EP '065.

For the foregoing reasons, Claims 1 and 2 are believed to be allowable. Furthermore, since Claims 3-14 depend directly or indirectly from either Claim 1 or 2, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 3-14 are believed to be allowable as well.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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